

What is claimed is:

1. A method for implementing a customized instance of a dynamic interactive voice system for a customer, the method comprising:

configuring a call flow that incorporates a plurality of call flow nodes within a framework of a predetermined interactive voice response application, the plurality of call flow nodes comprising different node types that are interchangeable with respect to call flow incorporation, the different node types comprising at least one standard node and at least one preprogrammed designer tool kit module, each designer tool kit module comprising an application separate from the predetermined interactive voice response application;

storing the call flow in association with an identification of the customer;

activating the stored call flow in response to a call to a dialed number associated with the customized instance; and

processing at least one call flow node of the stored call flow.

2. The method for implementing the customized instance according to claim 1, in which configuring the customer call flow further comprises:

displaying at least one data field relating to at least one parameter of each call flow node at a display terminal, the at least one parameter directing processing of the associated call flow node; and

receiving data defining the at least one parameter from the display terminal.

3. The method for implementing the customized instance according to claim 2, in which the at least one parameter comprises an identification number of a selected call flow node of the plurality of call flow nodes to be processed after the at least one call flow node.

4. The method for implementing the customized instance according to claim 3, in which an initial call flow node of the plurality of call flow nodes comprises a menu node.

5. The method for implementing the customized instance according to claim 1, in which the at least one standard node comprises one of a menu node, a transfer node, a vocabulary node and an end node.

6. The method for implementing the customized instance according to claim 1, in which the at least one designer tool kit module comprises one of an automatic attendant module and a names directory module.

7. A method for configuring for a customer a customized instance of a dynamic interactive voice application without altering the underlying computer programming of the dynamic interactive voice application, the customized instance being executed in response to calls to a telephone number of the customer, the method comprising:

storing a plurality of nodes executable by the dynamic interactive voice application, each node of the plurality of nodes being one of a plurality of predetermined node types comprising at least one standard node type included in the dynamic interactive voice application and at least one feature specific node type independent of the dynamic interactive voice application;

displaying a data field for each node at a graphical user interface, the data field corresponding to a variable parameter associated with the node type of the node; and

receiving data via the graphical user interface corresponding to the data field of each node, the data indicating a predetermined function to be performed by the corresponding node and establishing a call flow of the customized instance, the dynamic interactive voice application executing the predetermined function in accordance with the call flow regardless of the node type.

8. The method for configuring the customized instance of a dynamic interactive voice application according to claim 7, in which the data entered in the data field of each node comprises at least an identification number of a second node of the plurality of nodes, indicating that the call flow proceeds to the second node.

9. The method for configuring the customized instance of a dynamic interactive voice application according to claim 7, the at least one node type comprising one of a menu node type, a vocabulary node type and a transfer node type.

10. The method for configuring the customized instance of a dynamic interactive voice application according to claim 9, the data entered in the data field of a node from the menu node type comprising an identification number of a second node of the plurality of nodes, indicating that the call flow proceed to the second node when a caller selects a menu item number corresponding to the identification number of the second node.

11. The method for configuring the customized instance of a dynamic interactive voice application according to claim 9, the data entered in the data field of a node from the vocabulary node type comprising a predetermined vocabulary tag to be spoken via a voice generator to a terminal of a caller.

12. The method for configuring the customized instance of a dynamic interactive voice application according to claim 9, the data entered in the data field of a node from the transfer node type comprising a transfer destination code.

13. The method for configuring the customized instance of a dynamic interactive voice application according to claim 7, the at least one feature specific node type comprising one of an auto attendant module, a names directory module, a call library module, a voice forms module and a zip code locator module.

14. A system for implementing a customized instance of a dynamic interactive voice system for a customer, the system comprising:

an interactive voice response (IVR) system comprising a preprogrammed IVR application;

a user terminal that enables assembly of a call flow associated with the customized instance, the call flow incorporating a plurality call flow nodes within the IVR application, the plurality of call flow nodes comprising a plurality of node types that are interchangeable for call flow incorporation, the different node types comprising at least one standard node and at least one preprogrammed designer tool kit module, each designer tool kit module comprising an application separate from the predetermined IVR application; and

a database that stores the call flow in association with at least one port of a plurality of ports of the IVR system;

the IVR system initiating the IVR application in response to an incoming call received at the at least one port and executing the plurality of call nodes as directed by the call flow associated with the at least one port in the database.

15. The system for implementing the customized instance according to claim 14, the at least one port of the IVR system being associated with a telephone number of the customer, so that the incoming call is directed by a public switched telephone network to the at least one port based on calls to the customer telephone number.

16. A system for configuring for a customer a customized instance of a dynamic interactive voice application without altering the underlying computer programming of the dynamic interactive voice application, the customized instance being executed in response to calls to a telephone number of the customer, the system comprising:

an interactive voice response (IVR) system configured to execute a preprogrammed IVR application;

a database that stores a plurality of nodes executable by the IVR application according to a call flow of the customized instance, each node of the plurality of nodes being one of a plurality of predetermined node types comprising at least one standard node type dependant on the IVR application and at least one feature specific node type independent of the IVR application; and

a graphical user interface that receives the plurality of nodes from the database and displays a data field for each node corresponding to a variable parameter associated with the node type of the node, the graphical user interface receiving data, input by a user, corresponding to the data field of each node, the data indicating a predetermined function to be performed by the corresponding node and establishing the call flow of the customized instance, the IVR application executing the predetermined function in accordance with the call flow regardless of the node type.

17. A computer readable medium for storing a computer program that controls configuration and operation of an interactive voice response (IVR) system for a customer according to a preprogrammed IVR application, the computer readable medium comprising:

a configuration source code segment that enables configuring a call flow that incorporates a plurality of call flow nodes within a framework of the IVR application, the plurality of call flow nodes comprising at plurality of different node types that are interchangeable in the framework of the IVR application, the plurality of different node types comprising at least one standard node and at least one preprogrammed designer tool kit module, each designer tool kit module comprising an application separate from the IVR application;

a memory that stores the call flow in association with at least one port of the IVR system, which corresponds to a telephone number of the customer; and

an IVR source code segment that retrieves the call flow from the memory in response to an incoming call to the at least one port and executes the IVR application as directed by the call flow.

18. The computer readable medium for storing the computer program according to claim 17, further comprising:

an administrative source code segment that is initiated by an escape code received by the IVR source code segment via the incoming call and that enables at least one of an addition, a deletion and a change of an administrative variable associated with the call flow.

19. The computer readable medium for storing the computer program according to claim 18, in which the administrative variable comprises one of a telephone extension number and a voice announcement.

20. A computer readable medium for storing a computer program that enables configuration for a customer of a customized instance of a dynamic interactive voice application without altering the underlying computer programming of the dynamic interactive voice application, the computer readable medium comprising:

a storing source code segment that stores a plurality of nodes executable by the dynamic interactive voice application, each node of the plurality of nodes being one of a plurality of predetermined node types comprising at least one standard node type included in the dynamic interactive voice application and at least one feature specific node type independent of the dynamic interactive voice application; and

an interfacing source code segment that displays a data field for each node at a display terminal, the data field corresponding to a variable parameter associated with the node type of the node, and that receives data via the display

terminal corresponding to the data field of each node, the data indicating a predetermined function to be performed by the corresponding node and establishing a call flow of the customized instance, the dynamic interactive voice application executing the predetermined function in response to an incoming call to a telephone number of the customer in accordance with the call flow, regardless of the node type.

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